

### ABSTRACT

A process and a system are proposed for short-time arc welding elements, such as for example metal studs, on to components, such as for example metal sheets, wherein an element in the context of a welding operation is initially raised in relation to the component, a welding arc is formed between the element and the component, and the element is lowered again, the lifting height of the element in relation to the component being detected at least within a time segment between raising and lowering of the element.

The initiation of the lowering operation and/or the lowering operation itself is controlled as a factor of the detected lifting height such that a previously specified total welding time is achieved.